



Volume 12 No. 1

January 1962

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CIRCULATION AND PRINTING	-1-
Superintendent	K3KUD
Boss Stitcher	K3DJE
Printer	K3GNM
Collator	W3QQH
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The "Blurb" is published by and for the members of Phil-Mont to further the interest of Amateur Radio in general and mobile Radio in particular. We endeavor to keep the news accurate, interesting and in a small way educational. Copying and quoting is permitted, provided credit lines are included. Commercial use is not permitted and subscriptions are gladly exchanged with other radio clubs.

DEADLINES

The "Blurb" is mailed on the last Monday of the month. All material for the "Blurb" must be received by the Editor, W3ZPP% before the 15th of the month.

1961 CLUB OFFICERS

Pres.	Lloyd S	nerman	W3CDY
V. Pres.		reenwood	W3GOW
Treas.	Bob Die:	fenderfer	K3DJE
Sec.	Enos Ba	rtol	K3GNJ
Bed. of D	ir: W3's	NIP, VVS,	QQH, AWH,
		AK, DSG,	WNC and all
	,	1961 club	officers

Regular meetings are normally held on the 1st. Monday of the month. Check the calendar at right for the exact date. Meetings are held at the FRANKLIN INSTITUTE at 21st. and the Parkway, starting at 2000 hours (8 PM)

NET AND NET FREQUENCIA	SS
Ch 1 - 29493 Kcs.	Ch 3- Unassigned
Ch 2 - 29629 Kcs.	Ch 4-50.7 Mcs.
Scrambles Egg Net	0730-0830
Weekdays	
Ten on Ten Sundays	1000-1100
Blarney sessions any-	Ch 1 or 2
time	
29493 Monitored daily	0930-2400
for the benefit of mol	oiles in the Phila.

PMRC CALENDAR

January 8, 1962 REGULAR MEETING 8 PM FRANKLIN INSTITUTE

COMING MID-MONTH MEETINGS

January		W3WNC
February		W3QQH
March		W3YHV
April	Stag	Dinner
May		W3ADV
June		W3DJW
July		Open
August		WINIP
September		W3VVS
October		W3CDY
November		W3ADF
December		Open

January MID - MONTH is Wednesday the 17th.

PROGRAM COMMITTEE

WBJYA Chairman K3HIJ W3AWH



First, and most appropriate, I wish to extend my deep felt thanks for your expression of confidence in electing me your president for 1962. I will do my best to fulfill my obligations to Philmont and its activities.

I will also take the liberty of expressing the thanks of the successful candidates for the other elected offices. Their perticipation in the past has proven their willingness which they will most certainly carry over into the performance of their new duties.

The New Year of 1962 is being launched with the good news of WJTKQ. This good news, reported elswhere in this issue, is the result of the efforts of Lawrence WJQCV and Fred WJADV and his WJTKQ committee. All who participated in this function deserve great praise for their commendable and successful efforts. May we also count on your continued work.

We, as a group, have a unique fellowship that is enjoyed by about 35% of the membership. This fellowship is in the activity of the club and its related mobile activity.

We close the year 1961, with a feeling of deep satisfaction. Since 35% of the club membership can have such a fine year, it poses the question, "How much more fellowship we would have if we had 50%, 60% or greater participation?"

Past records show Philacent thrives on activity. Activity is the by-word for 1962. In this activity we have our fellowship. We look forward to seeing more of you come out and join us.

Starting in February we will need your help to carry out our Junior Club Program at the Institute. The subjects to be covered will be scheduled. Scheduling will undoubtly be partially determined by the part you play. The present plans will establish a program for about 8 months. We have had several volumteers and more are needed. You need take only one or two meetings per year and this can be your favorite subject. Let me hear from many of you.

The thing that bothers me most is that I do not know many of you as I feel I should. Lets all get better acquainted in 62. Your attendance at club meetings and activities is the best way. May we see you at the Institute on January 8th.

de W3CDY

Newly elected officers of Phil-Mont Mobile Radio Club to serve for the coming year are as follows:

President	Lloyd Sherman	W3CDY
Vice-President	Charles Greenwood	W3GOW
Secretary	Enos Bartol	Kygnj
Treasurer	Robert Diefenderfer	K3DJE
Director	Clinton R. Spencer Jr.	WEQUE

We wish to congratulate these men on having been elected and wish them a most successful year.

The officers of a club can not do a job without the support of the club. The best way to support your officers is by active committees. If the committee's let the club and their officers down, by not doing their share and handling their portion of the load, the club will not function as efficiently as it could.

We have elected these men, now it is up to us to cooperate with them 100%. If you are placed on a committee accept with pride. If you are not on a committee look at the list of committee's that follow. You will see the various committees, the first call under each heading is the chairman of that committee. Should you' have some suggestions or wish to help in some contact the chairman, offer your help he will be glad you did and so will you.

THE FOLLOWING NAMES ARE TENTATIVE

1962 COMMITTEE'S

MEMBERSHIP	PURI.ICITY	FROORAM
W3D\$G	W3JYA	W3JYA
W3JYA	K3HWX	
K3EWX	II JUNA	KJHLJ
W3VVS		WBAWH
Wyvis		
ACTIVITIES	FRANKLIN INSTITUTE	FIELD DAY
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W3QQE	W3CDY	WEYEV
	WEEDA	KJHIJ
	K3KDP	
	W3JYA	
BANQUET	TV PROGRAM	WITE
W3FCG	WENTE	WBADV
WEWED	K3EWX	W3QCV
K3HLJ	W3DJW	WINIP
	WIWO	MACCH
TOTOR	WESMT	HAREW
PRIZE	M3 COE	WBQZO
W3QZ0	w) detr	W3AK
W3WNC	12/77/72/72/000m	An Tabast
W3FOG	EQUIPMENT	AUDIT
	M366H	WBAWE
BUDGET	K3GNJ	W3D\$G
	W3VVS	WSWNC
WEGOW	K3KUD	
Madde	W3QZO	REFRESHMENTS
K3DJE W3NIP		WEGIF
Wanc		
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The rere and little-used metal rhenium can greatly extend the life and reliability of tubes used in radio and television sets.

Development of a new rhemium-tungstem alloy for heater and filament wirethe first significant change in basic receiving tube heater material in more than 50 years-was termed an electronics "breakthrough" at a General Electric press conference here today.

Alloying rhenium and tungsten makes possible a fine wire that can increase as much as four and one-half times the reliability of receiving tubes--which engineers from the company's Receiving Tube Department, Owensboro, Ky., said test data shows already are among the most reliable electron control devices.

Filament wires for "heaters" made with the new alloy are much stronger physically and have better heat-tolerance and electrical characteristics than the tungsten wire normally used, the engineers explained.

Adaptation of the new wire to Compactron multi-function devices and conventional tubes for radio and television is under way at the company's receiving tube plant in Owensboro. A marketing executive of the department said the wire will be used first in the tube types where tests show it to have immediate advantages.

The trend toward smaller and more compact sets will be speeded by the use of the wire in the Compactron devices which were developed by G.E. These multifunction units, being used in lieu of conventional tubes and transistors in several radio, television and communications equipments now on the market, should now be able to run cooler, the company spokesman said.

Tungsten has been used for receiving tube filaments and heaters since about 1950. Discovery of the rhemium-tungsten alloy properties heralds the first substantial advance in three decades in basic heater materials, G.E. said.

Traces of rhemium are found in many mined ores, particularly in molybdenites associated with copper, but the element usually is disposed of with waste material for lack of a market and the relative difficulty of refining it. It is heavier than lead and more costly than gold. The small amounts that are refined cost about \$600 per pound.

The new wire was developed by the company's Lamp Metals and Components Department in Cleveland. It will be used in photoflash lamps to increase "flashability" by providing better synchronization and making bulbs easier to fire, even with weak batteries.

Many standard miniature receiving tubes can profitably employ the new wire also, and company representatives said they are investigating the merits of its use in these types as well as in Compactrom devices.

The new wire will be used too in high-reliability tubes even though these military types already are designed and manufactured with such care that they are not generally subject to the type of failures the new wire will prevent. An executive said he has yet to hear of a rocket or missile shot failure due to electron tube failure.

While the larger glass and metal receiving tubes ordinarily employ tungsten filaments heavy enough to withstand easily the stresses of normal use, the new wire already is being used in one of these types too.

The tube engineers said tests show that rhemium-tungstem wire has less tendency to break or twist over a period of time under stresses of alternate expansion and contraction from heat as radio and television sets are turned on and off. The alloy wire remains straighter throughout its life than ordinary tungstem wire.

The alloy wire also has a higher electrical resistivity than the wire customarily used in tubes. Its use permits either a larger filament wire size (which adds further to the strength of this part of the tube) or a shorter filament length-whichever may be the most advantageous in improving the design of a particular tube type.

In addition, the alloy has a higher "cold resistance" than tungsten. Thus not only can the new wire better tolerate the initial surge of electric current in a tube filament when it is first turned on, but the higher resistance reduces the amount of surge current.

The new alloy also will provide an additional tolerance for tubes used in areas where the home power line voltage runs higher than normal. This is a fairly common problem often created by the mushrooming of new home developments.

Test data supporting these expectations included:

- 1. In a standard accelerated destruction test, with heaters turned on and off every five minutes at mearly twice normal voltage, samples of the television type 25DZ8 with the new heaters showed 30 times better survival. Ninety per cent of them still were operating satisfactorily after the equivalent of 5 years and 9 months of home usage at which point the test was abendoned. (In this destruction test 45.75 volts were applied to the filaments as compared with the normal 25 volts; and the cycling of 12 times an hour was estimated to be at least ten times more frequent than in normal home use. Average television set operation of six hours a day was assumed. Engineers said that because of the thermo-chemical effects involved this test actually is far more strenuous than the mere mathematical extension of voltage and cycling rate indicates.)
- 2. Another grueling test specially designed to place severe stresses on the beater of the already highly reliable military type 6201 (similar to the 9-pin commercial 12AT7) showed that at 4,000 hours of test under these accelerated conditions only 20 per cent of the standard-heater samples were still operating. In contrast, the improvement in reliability due to the new rhenium alloy was shown by the fact that 90 per cent of the samples with the new alloy had shown no heater failures-4.5 times better survival rate than the standard heater tubes.
- 3. The high voltage rectifier type LJ3 showed under test that emission current actually increased over a period of time when the rhenium-tungsten alloy wire was used as the filament whereas rectifiers with standard tungsten filaments showed decreasing emission.

Similar tests on additional tube types have been made, and each supports the expected improvements in tube life and reliability as a result of the use of the rare metal rhemium in the heaters or filaments.

Dear Gladyes

I have a minute this afternoon, so I'll dash off a letter to you. I was so surprised that you didn't know Clyde is a "Hem". I mean, we weren't trying to hide it or anything.

I just love being an XYL . . . isn't that oute? That's what they call their wives. Clyde call my mother "hirs. QRM" but I don't know what that means, yet.

We get along much better now that Clyde is a ham. We never argue like some couples do. Of course, we don't talk much. You see the only voices he really hears are at the other end of a long skip. I tried to speak with a little fading and distortion one day but he tried to tune me in better and we got sort of confused. I'll have to think of something else. Anyway, he is a dear.

We get lots of facinating mail now. Even if I can't understand all of that electronic talk, I still try to be interested in it. It's a good thing, too, because I had to throw away a card that Clyde got from some fresh lady ham in Arkansas. She had on there, "WAS 25". Well, Gladys, weren't we all, but why breg about it now? I just can't understand some people. But back to the mail' -he gets some real pretty catalogs in the sweetest pastel colors. I think they do that for the wives. In fact, I wrote and thanked one company but they didn't answer, They forget to send their next catalog, too. Gladys, do you remember those two fellows in vauderville who used to do that soft shoe routine? Weren't they Burstein and Applebee? Well, they are in electronics now. They send lots of mail.

It is awrully easy to buy gifts for Clyde now that he has a hobby. What I do is economize in little ways like going without stockings and not eating lunch and wearing my hair straight like this. Really, like Clyde says, any wife should be glad to do without the little extras so her husband can have the mecessities for his hobby. Well, anyway, when I have about twenty dollars saved I give that and some catalogs to Herman K4GRV who is Clyde's best friend. Herman sends away for something and when it comes I wrap it up in pretty paper and give it to Clyde. That way it's just what he wants. I don't always know what it is that I have given him but Gladys' he appreciates it so. Like Clyde says, any wife should be glad - oh' I said that, didn't I Guess I'm beginning to say it as often as Clyde does.

Do people up there give gifts on Groundhog Day I never heard of it before but Clyde says it is an old ham ouston. He has already told Herman what to order for me to give him.

If you make a trip to Florida, please come to see us. Our house won't have any trouble finding us. Just look for four antennas and tall grass.

Your friend, Mabal

P.S. Clyde says 75°s. I don't know what that means, but i bet it's real cleaver.

(Florida Skip)

Important developments in electronics will be described by scientists and engineers of eight General Electric departments in a series of weekly "ham" radio broadcasts.

The programs will be beamed to the 100,000 radio amateurs who make up the eastern technical network of the U.S. Air Force Military Affiliate Radio System (MARS). G.E.'s Receiving Tube Department is co-ordinating the series.

Each program will be taped for broadcast at 2 p.m. (EST) on its assigned Sunday. Programs will last an hour and will be followed by "live" on-the air question-and-answer periods.

Schedule for the broadcasts is:

January 7 -- "New Electron Tubes for The Modern Era", by Dr. J. E. Beggs, Research Laboratory, Schemectady.

January 14 - "Thermicaic Integrated Micro Module Circuits for High-Temperature Environments", by Allen P. Hease, WhPPQ, Receiving Tube Department, Owensboro.

February 11 -- "Exploring the Ionosphere with Satellites", by Dave M. Bray, KZIMG, Advanced Electronics Center, Ithaca, N.Y.

March & -- "Tunnel Diodes -- What They Are -- And What They Can Do", by R.L. Watters, W2RDL, Research Laboratory.

March 11 -- "Tunnel Diode Circuitry", by Eric Gottlieb, Semiconductor Products Department, Syracuse, NoYo

April 1 -- "The Advantages of Compactron Multi-Function Tubes in Electronic Equipment", by Leo T. Bowles, WhJPQ, and C. D. McCool, Receiving Tube Department.

April 8 -- "What Computers Can Do", by Ed Wolff, General Engineering Laboratory, Schemectady.

April 15 -- "Latest Trends in Military Type Transistors", by David T. Geiser, Light Military Electronics Department, Utica, N.Y.

CHANNEL CHATTER

The Barometer Reeding at 10 Sunday norming was 29.495....HQJ is rebuilding his intercom rig....DJV off on a trip....For Sale one wet models contact WjNO....KjHMX recently appointed Emergency Coordinator for Delaware County Area-Looking for Phil-Monters in the Delaware County Area to be active on 29 MC. Net - also 6 Meters (50.7) Lieson with 10 Meter Net...New AF68 and FMR8 for WiADV....KMMZ mobile for WjADF....WjFXY recorded the whole pack of lies for a little blackmail later this year (election speeches) George wents to know if anyone cares to pay up now....QQH about to top the 40 ft. tower with 10,6, 2 meter beams and a coax on top....IVO going Aero Mobile....12-pin sockets for compactrons now packaged in pairs in plastic bags - sockets call for a chassis hole of 1-1/8 inch diameter....WjFQG is now in charge of Almo Radio's HI-FI and Commercial Sound departments in all 12 stores....Comm truck drivers will be checked out in near future....

January program will be demonstration of Spark Gap transmitter.....CH's daughter getting married....WjGTC joined Channel One- She and Harold EQZ are cracking the books for a power Squadron Course....KDF put a missing persons message on Channel One for CUL.....

LWCW, the Signal Supply Agency Club Station worked GIF nobile giving out frequency checks - GNJ, 2949- - DJV/N 29492.8 - DAG, 29495.1 - UME, 2949-5....

MANUEL CHATTER CONT.

WJWRC got a letter addressed to GOW....DJW and D\$G comparing notes on their respective number of TV sets....Usage of Channel One - inquiry re father's sweater -? taken by "Ham" son??? .. AWH resigning as Ec, Montgomery County....One Thursday each month at 1900 the 29.520 area spread out - Zome 1 29480, Zome 2, 29620 - Zome 3, 29500 and Zome 5, 29460....Thanks to Dick, WJWM for the above info....
Here's Wishing You All A Very Happy and Prosperous New Year - from your editor.

SWAP AND SHOP

For Sale:

Pair RCA C.B. Mark VII - 21 Mc. Transceivers

Al Lewis - W3WPD HI-7-0114

For Sale:

Globe Chief \$50.00
AF67 Elmo Transmitter \$100.00
FMR6 Elmac Rovr. \$100.00
James Power Supply \$25.00

WEWNC

For Sale:

Dynamotor mounted starting relay out-\$20V @ 280 MA in - 5.8 Volts \$7.50
PP626 Modulator Ho Watts W/Fower Supply \$15.00
6 Volt Mallory VIB Pack 325V @ 100 Ma \$7.00

W3CDY

For Bales

Johnson 50 Watt all band Mobile Transmitter - New Never used

\$60 .--

W3HHQ TU-6-4772

For Sale?

Heath Kit 6D-61 Reverberation Unit. Adds realism and depth to any HI-FI by adding reverberation. Complete never used W3QCH \$69.00

Mon-Key fully automatic keyer complete with monitor and schematic.

W390H \$20.00

Shure Despatcher Type Microphone with FIT-High Impedence W3QQH \$15.00 Brand new AR-22 Rotator Complete (amateur net 3300) W3QQH #20.00

For Sale

Mobile entenna mount with spring 10 meter mobile whip ' both almost new

Robert Engelhardt N3QXC Telephone 08-2-0520 Both for #10.00

JUNIOR HADIO CLUB

The Franklin Institute Science Museum, in cooperation with the Philmont Mobile Radio Club, is pleased to amnounce a Junior Radio Club for students in grades '-7 - 12. The purposes of this club are as follows:

- 1. To promote the general welfare of anateur radio in the Delaware Valley.
- To provide and direct activity for interested boys and girls of junior and senior high school ages.
- To stimulate interest in all aspects of electronics.
- 4. To promote fellowship among students interested in electronics and amateur radio.

WHEN? - The first and third Saturdays of each moath, beginning January 20,1962.
WHAT TIME? - 2:00 to 4:00 P.M.

WHERE? - The science Museum of the Franklim Institute, 20th and parkway, Philadelphia 3, Pennsylvania.

WHO MAY JOIN? - Any Student Member of The Franklin Institute or student covered by a Family Membership. (Institute dues are \$5.00 for students, \$7.50 for teachers, and \$15.00 for family membership.)

IS AN AMATEUR LICENSE NECESSARY? - No. All you need is an interest in electromics.

ADVISOR? - Mr. Lloyd Sherman of the Philmont Mobile Radio Club.

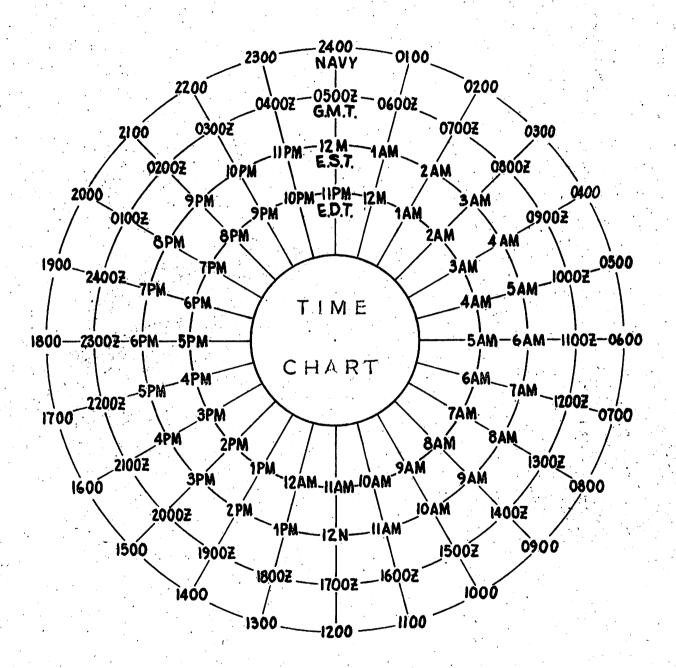
MORE INFORMATION? -- Call Mr. Thomas M. Barnshaw, Administrator for Museum Education, LOcust 4-3600, extension 440.

THOSE WEO PLAN TO ATTEND THE FIRST MEETING SHOUD INFORM THE MUSEUM OFFICE BY JANUARY 18, 1962.

Franklin Institute Station- WilkQ

W3QCV has announced the offer by the Collins Radio So., Cedar Rapids, Iowa, to completely equip WJTKQ with the latest in Collins Sideband gear. In addition to the 328-1 transmitter, 758-3 receiver, and 308-1 Linear aplifier and power supply, Collins suggests a 312B-4 speaker comsole (contains speaker, directional wattmeter, and switches for station control funtions) SM-1 Dynamic microphone and stand, DL-1 Dunmy Load for tune-up convenience, and an operation comsole described as white formica top, walnut base, etc. Collins will send complete picture to QCV at the carliest opportunity so that the Institute may be fully aware of the Collins viewpoint on the station display. The company's only stipulation is that no other commercial radio equipment be displayed in the immediate vicinity of the Collins equipment. I think this is a small price to pay for a gratis station worth something in the vicinity \$3300.00. Further it is my understanding that the Institute has approved an appropriation for 1962 for the construction of a soundproof, air conditioned endlosure for the Amateur display of W3TKQ. Past contact with Institute officials indicates complete agreement (within the budget possibilities) to the premise that WJTKQ, when completed is to be, rather than a typical bam station, the ideal amateur station. If this is realized, Phil-Mont-sponsored Wilk will be the ultimate in equipment, operating convenience, and surroundings. The active committee, including WBADV and WBQCV, should be given a vote of thanks for their past work and all the help in the future that Phil'Mont can muster.

MAGGE



"THE BLURB"

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TIME VALUE Meeting Notice Return Postage guaranteed Form 3547 Requested

C. R. Spencer W3QQH 124 Central Ave. North Hills Pa. R